

N° 15,775



A.D. 1912

Date of Application, 5th July, 1912—Accepted, 3rd July, 1913

COMPLETE SPECIFICATION.

Improvements in Percussive Tools.

I, ALBERT CHARLES JAMES GUENEE, of 18, Avenue du Chateau, Joinville le Pont, in the Republic of France, Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

- 5 This invention relates to improvements in portable percussive tools of the type in which devices are provided for rendering the tool inoperative except when pressed to its work. More particularly the invention contemplates the application to portable percussive tools, in which the motive power is electricity, of controlling means of the type in which the tool is rendered inoperative until
10 two independent controlling devices are in operative position.

- The improved device comprises, in accordance with the invention an electric button switch located in the handle of the percussive tool and another switch located beneath the handle and adapted to be closed by pressing the tool to its work, these switches being arranged in such a manner that the electric motor
15 which controls the operation of the mechanism is not started unless and until the two switches are in the "on" position.

The invention is illustrated in the accompanying drawing, in which:—

- Figure 1 represents the handle of the apparatus with the starting devices.
Figure 2 is a plan of the handle springs the handle having been removed.
20 Figure 3 is a sectional end elevation of these springs.
Figure 4 is a diagram of one connection for the starting devices.

The handle comprises the two devices necessary for affording perfect safety. The first starting device is a button switch which starts the motor directly or by the intermediary of a relay.

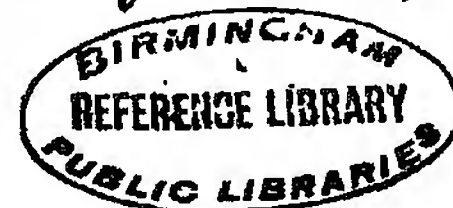
- 25 The button switch is operated by bringing the contact lever *p*, which may be a spring into contact with the terminal piece *w*. A spring *q* which is very weak relatively to the spring *p* may be arranged between the lever *p* and the terminal piece *w*, so as to serve to maintain contact notwithstanding vibration of the apparatus.

- 30 In order to prevent starting when the apparatus is not in the normal working condition the first switch is so situated that it cannot complete the electric circuit until the tool has been pressed against the object to be hammered. With this object the handle *o* is movably connected to the gear case *r* by means of metal springs *s* for example and the movement of this handle when acted upon
35 by the hand is utilised for closing a switch *t* arranged in the circuit of the motor *u* (Figure 4) or of the relay in series with the first switch.

In the case just described the resiliency of the connection of the handle with the gear case presents the great advantage of largely reducing the vibrations of the handle and of rendering the employment of the apparatus less fatiguing.

- 40 The switch *t* controlled by the handle *o* is formed of highly flexible springs *v* in order to prevent inopportune breakages which might be produced by vibration.

[Price 8d.]



Guenee's Improvements in Percussive Tools.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

In a portable percussive tool operated by an electric motor a safety device for rendering the tool inoperative except when pressed to its work, comprising 5 a button switch arranged in the handle in combination with another switch arranged beneath this handle, the starting of the motor controlling the mechanism being obtained, after closing the button switch by the thrust that it is necessary to exert upon the handle during operation, this handle being movably connected to the gear case by means of springs which absorb the 10 vibrations of the apparatus.

Dated this 6th day of July, 1912.

HASELTINE, LAKE & Co.,
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60, Wall Street, New York City, U.S.A., 15
Agents for the Applicant.

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1.

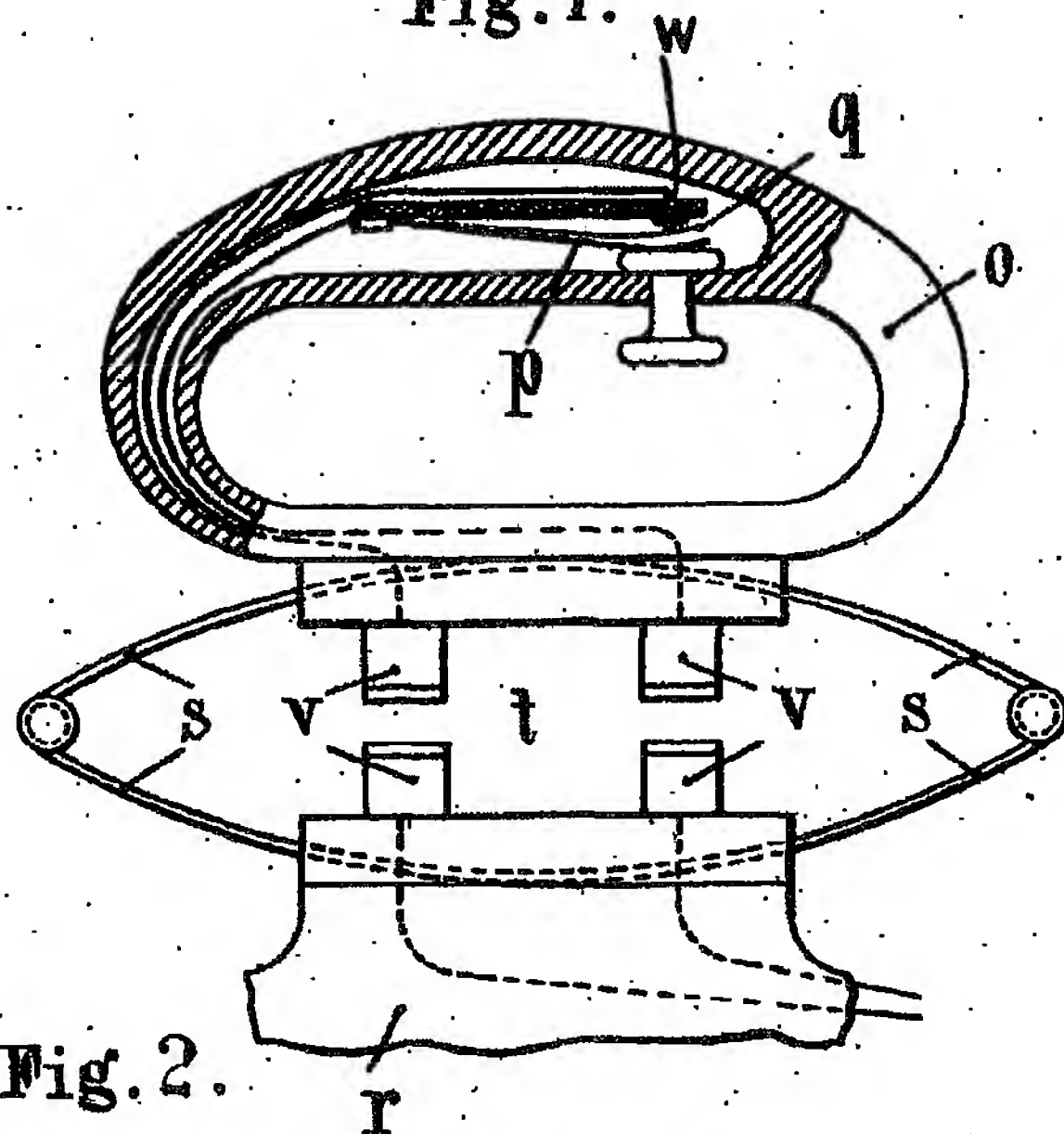


Fig. 2.

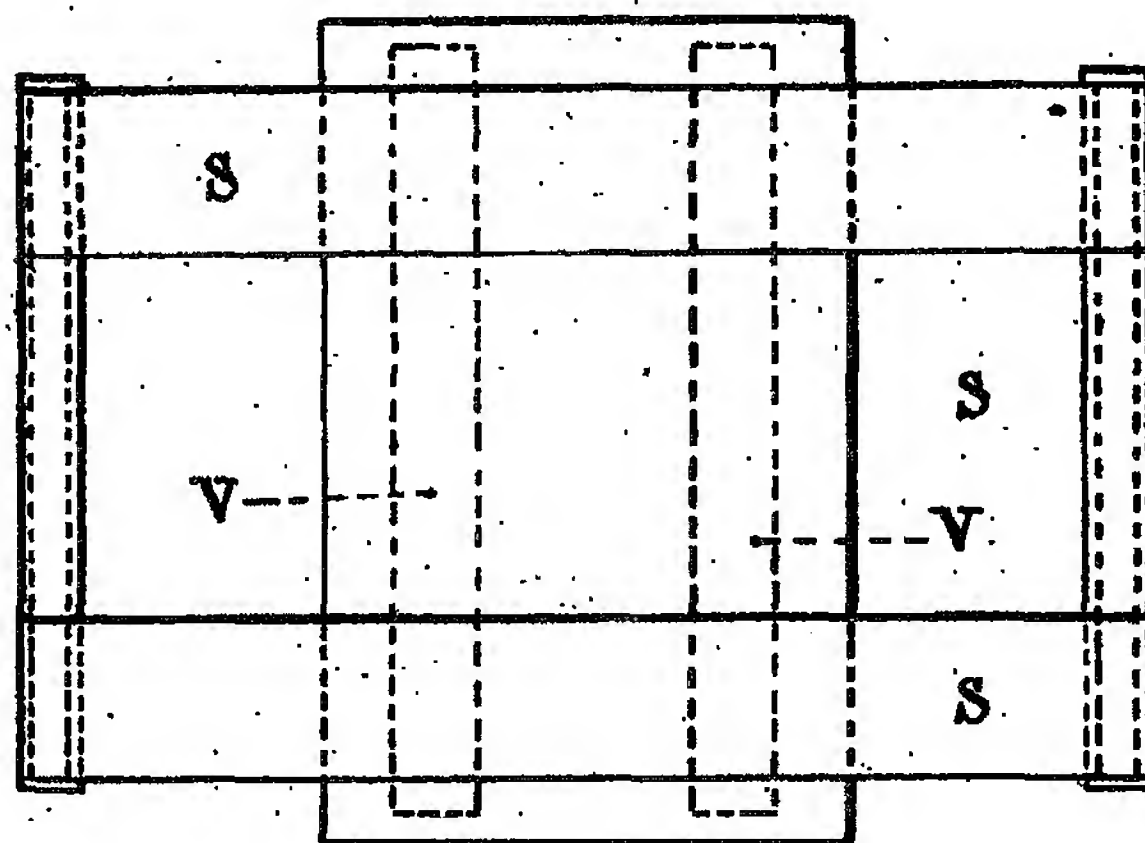


Fig. 3.

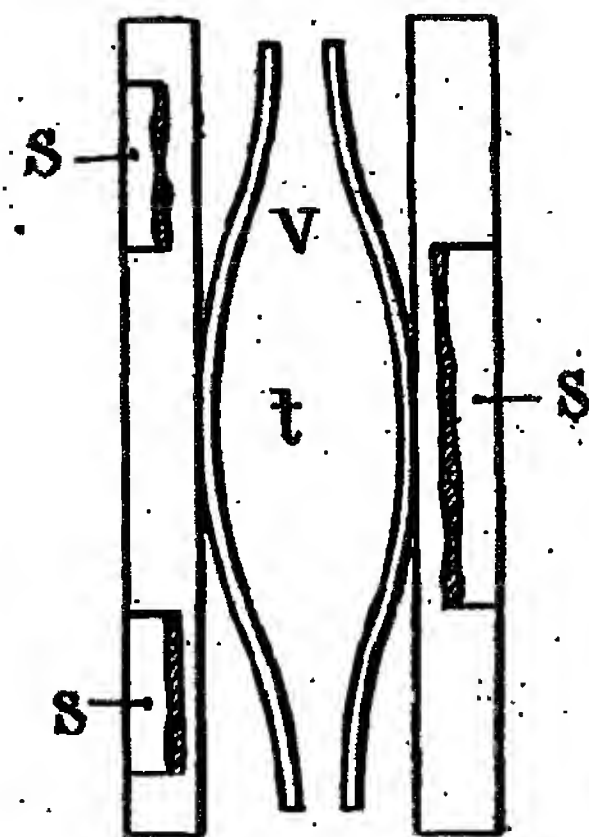
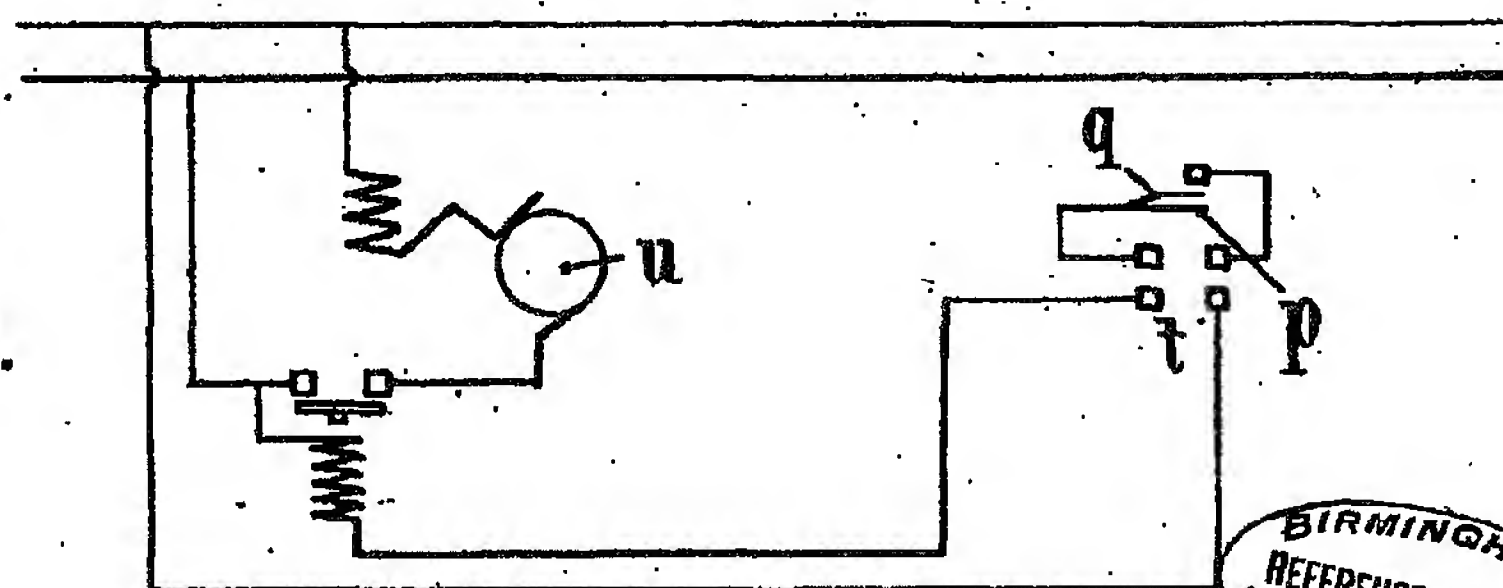


Fig. 4.



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